THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 15

UNITED STATES PATENT AND TRADEMARK OFFICE

_____

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

_____

Ex parte EDWARD J. GIORGIANNI and THOMAS E. MADDEN

_____

Appeal No. 96-3087
Application 08/059,060[1]

_____

ON BRIEF

_____

Before BARRETT, FLEMING, and LALL, Administrative Patent Judges.

LALL, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 24 through 46. Claims 1 through 23 have been cancelled. The

[1] Application for patent filed May 7, 1993.

amendment after the final rejection was entered for the purposes of this appeal.

The disclosed invention relates to a color-imaging method for generating input signal transformations that allow the use of any type of input or output media or device, including highly disparate media and devices such as photographic negatives, positive transparencies, reflection prints, and electronic signals. It describes an intermediary color space that represents the color appearance of each input image, as viewed in a specified input viewing environment. The viewing environment is defined in terms of surround, adaptive white point, and viewing flare.

The input transformations account for the differences in the defined viewing environments associated with each input source and a uniquely defined reference viewing environment specified for the intermediary color space. The output transformations account for the differences in the viewing environments associated with each output and the reference viewing environment defined for the intermediary color space. These transforms thus account for both the physical effects of

the various viewing environments and for the adaptive effects that each environment would have on the color perceptions of a viewer.

Representative claim 41 is reproduced as follows:

41. A method for forming at least one transform for transforming colorimetrically-specified values to intermediary color-image data encoding values, comprising the steps of:

a) specifying an input-image viewing environment in terms of its illuminant spectral energy distribution, amount of viewing flare light, surround type, and adaptive white point chromaticities;

b) specifying an encoded-image viewing environment in terms of its amount of viewing flare light, surround type, and adaptive white point chromaticitiers;

c) generating colorimetrically-specified test color values which adequately sample and cover the useful colorimetric value range;

d) adjusting said colorimetric values in accordance with the difference in the amount of viewing flare light specified for the input-image viewing environment and the encoded-image viewing environment to form flare-adjusted colorimetric values;

e) adjusting said flare-adjusted colorimetric values in accordance with the difference in the surround types specified for the input-image viewing environment and the encoded-image viewing environment to form surround-adjusted colorimetric

values; and

f) adjusting said surround-adjusted colorimetric values in accordance with the difference between the adaptive white point chromaticities specified for the input-image viewing environment and the encoded-image viewing environment to form intermediary color-image data encoding values; and

g) forming at least one transform by relating said colorimetrically-specified test color values to said corresponding intermediary color-image data encoding values.

The references relied on by the examiner are:

Carlucci et al.(Carlucci)	5,191,645	March 2, 1993
Rolleston et al.(Rolleston)	5,305,119	April 19,1994

Claims 24 through 46 stand rejected under 35 U.S.C. § 103[2].

As evidence of obviousness, the examiner offers Carlucci and Rolleston [answer, page 2].

Reference is made to the appellants' brief and the examiner's answer for their respective positions.

OPINION

We have carefully considered the entire record before us, and we will reverse the obviousness rejection of claims 24 through 46.

[2] The examiner has withdrawn the rejections of these claims under 35 U.S.C. § 112, second paragraph [answer, page 2].

With respect to independent claim 41, the examiner basically takes the position that Carlucci shows every thing claimed therein except the intermediary color values. The examiner contends that Rolleston shows the intermediary color values in figure 1 as "colorimetric digital data" in an analogous art for the purpose of device independent color correction. The examiner concludes that it would have been obvious, to one of ordinary skill in the art at the time of the invention, to apply Rolleston's intermediary color values to Carlucci's color correction because of Rolleston's taught advantages of

intermediary color values for device independent color correction [answer, pages 3 through 5].

The appellants argue that figure 4 of Carlucci, which the examiner primarily relies on, shows the image correction based only on the conditions of the scanner, and it cannot account for changes in color appearance caused by changes in the actual input viewing environment [brief, page 9]. The test

signal, item 40, of Carlucci is used for device calibration. It is completely unrelated to an appearance-based colorimetric value having a specified reference viewing environment [brief, page 9]. The appellants further argue that Carlucci does not teach the modification of the colorimetric values of these test colors in accordance with the input image environment, the encoding, and the output viewing environment [brief, page 10].

Similarly, the appellants argue that Carlucci does not show a correction to the image based on the characteristics of flare, surround type and adaptive white point chromaticities in accordance with the difference between the input viewing environment and the reference viewing environment [brief, pages 10 through 12].

The examiner responds that the scanner and the film in Carlucci form parts of the input viewing environment since they are input components used for viewing the input and form part of the input ... system [answer, page 9]; that Carlucci's

test signal forms part of the viewing environment because its output contributes to the viewed result and it is part of the system environs [answer, page 10]. The examiner contends that Carlucci's device flare adjustment is equivalent to the claimed environment based flare adjustment because the input device of Carlucci forms part of the input viewing environment [answer, page 11]. The examiner points to Carlucci's column 7, lines 1 through 20 for the claimed view environment based surround adjustment, and for the adaptive white point chromatic adjustment, where the image data is adjusted for both the difference between an individual pixel data and the average pixel data that surrounds the pixel, and for the white shading correction [answer, page 11].

In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the examiner to establish a factual basis to support the legal conclusion of obviousness. See In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the examiner is expected to make the factual determinations set forth

in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (CCPA 1966), and to provide a reason why one having ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir.), cert. denied, 488 U.S. 825 (1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), cert. denied, 475 U.S. 1017 (1986); ACS Hosp. Sys., Inc. v. Montefiore Hosp., 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness. Note In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992).

As indicated by the cases just cited, the examiner has at least two responsibilities in setting forth a rejection under 35 U.S.C. § 103. First, the examiner must identify all the

differences between the claimed invention and the teachings of the prior art. Second, the examiner must explain why the identified differences would have been the result of an obvious modification of the prior art.

In our view, the examiner has not properly met his first responsibility or his second responsibility. The disclosure of the invention and the appellants' brief describe the invention as methods and means for transforming input image data into intermediary color-image data encoding values, and further for providing compatibility among disparate sources of input images while additionally providing the capability of matching the appearance of said input images on any of a plurality of output devices for any of a plurality of viewing conditions.

Claim 41 contains, among others, the features of: specifying an input-image viewing environment, specifying an encoded-image viewing environment, and adjusting the colorimetric values in accordance with the difference between the chromatic characteristics of the two viewing environments.

Carlucci does not have the means and the capability of

correcting an input image in accordance with the input viewing environment and the output viewing environment. Rather, Carlucci performs the correction of an input image using a convential calibration procedure whereby the input image is calibrated within itself using a predetermined calibrating scheme, not in accordance with the variable chromatic difference between the input environment and the output viewing environment. The addition[3] of Rolleston's teaching does not cure this deficiency.

Thus the collective teachings of Carlucci and Rolleston do not support the rejection of claim 41 proposed by the examiner. The rejection of claim 41 is reversed.

The other independent claims, claims 24, 30, 37, 43, 45 and 46, all contain the features discussed above in regard to claim 41. Therefore, the rejections of these claims under 35

[3] The appellants argue the propriety of combining Carlucci and Rolleston as a side issue. However, we are of the view that this issue is moot to our decision.

U.S.C.

§ 103 are reversed. Furthermore, since the remaining claims all depend from these claims, their rejections 35 U.S.C. § 103 are likewise reversed.

DECISION

The decision of the examiner rejecting claims 24 through 46 under 35 U.S.C. § 103 is reversed.

REVERSED

LEE E. BARRETT Administrative Patent Judge	)	
MICHAEL R. FLEMING Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND

)
) INTERFERENCES
)
PARSHOTAM S. LALL)
Administrative Patent Judge)

PSL/pgg

Thomas H. Close
Eastman Kodak Company
Patent Legal Staff
Rochester, NY 14650-2201